

REMARKS

Claim 1 has been amended to recite that the thin coating film has a thickness of not more than $0.5\mu\text{m}$. Support is found, for example, at page 17, line 23 of the specification "especially not more than $0.5\mu\text{m}$ ".

New claims 10-17 are directed to a thin coating film comprising at least two layers of a fluoropolymer layer (A) (having a hydrophilic functional group) and a fluoropolymer layer (B) (having no functional group) and a total thickness of less than $3\mu\text{m}$. Support is found, for example, at page 22, lines 21-25 of the specification "i) a thin coating film comprising at least two layers of a layer (A) and a layer of (B) and having a total thickness of less than $3\mu\text{m}$ ".

By amendment of claim 1 to recite that the thin coating film has a thickness of not more than $0.5\mu\text{m}$, Example 6 ($1.2\mu\text{m}$) and Examples 8-10 ($1.0\mu\text{m}$) of the present specification fall outside the scope of amended claim 1. These are now comparative Examples.

Entry of the amendments is respectfully requested.

Review and reconsideration on the merits are requested.

Claims 1, 3-7 and 9 were rejected under 35 U.S.C. § 102(b) as being anticipated by WO 97/21776 to Araki et al (WO '776). U.S. Patent 6,069,215 was further cited as corresponding to WO '776.

WO '776 was cited as teaching the invention substantially as claimed, including a coating composition meeting the terms of both claims 1 and 9 with respect to monomer composition, coating film thickness, crystalline melting point, polymer content of the aqueous dispersion and particle size.

Applicants traverse, and respectfully request the Examiner to reconsider in view of the amendment to the claims and the following remarks.

WO '776 discloses a coating film having a thickness of not less than $1.0\mu\text{m}$. Therefore, amended claim 1 which specifies a coating film having a thickness of not more than $0.5\mu\text{m}$ is not anticipated by and is novel over WO '776.

The significance of the claimed thickness of not more than $0.5\mu\text{m}$ is shown by comparing the results of Example 5 ($0.18\mu\text{m}$) with Example 6 ($1.2\mu\text{m}$) in terms of Infrared ray reflectance (%) in Table 2 at page 54 of the specification. The Infrared ray reflectance at 45° and visual light reflectance of Example 5 were 87% and 99.9% respectively, whereas those of Example 6 were 75% and 92.4%. The visual light reflectance of Example 8 ($1.0\mu\text{m}$ thickness, corresponding to the lower limit of WO '776) was 95%. The above-noted results show excellent transparency of Applicants' coating film having a thickness of not more $0.5\mu\text{m}$ relative to the coating film of WO '776 having a thickness of not less than $1.0\mu\text{m}$.

The above-noted results establish that the claimed range of not more than $0.5\mu\text{m}$ achieves unexpected results relative to the prior art, and that the claimed range is therefore critical to achieving the effects of the invention.

Applicants comment on patentability of independent claim 10 over WO '776 as follows.

Although WO '776 (corresponding to US 6,069,215) and WO '229 (corresponding to US 6,500,537) disclose a multi-layer coating film, the top coating layer of the fluorine-containing polymer having no functional group (corresponding to the layer (B)) has a thickness of $5\text{-}50\mu\text{m}$ by spray coating or $20\text{-}2,000\mu\text{m}$ by electrostatic coating (column 15, lines 6-13 of US '215) and

5-50 μ m by spray coating or 5-100 μ m by electrostatic coating (column 16, lines 35-41 of US '537). Thus, the multi-layer coating film having a total thickness of less than 3 μ m of claim 10 is novel over the prior art of record. The significance of the claimed total thickness of less than 3 μ m is demonstrated by Examples 11-13 of the specification. As shown in Table 4 at pages 64-65, although the infrared ray reflectance at 45° of Comparative Example 13 (total thickness of 4.0 μ m) is 58%, that of Example 13 (total thickness of 2.0 μ m within the scope of present claim 10) is remarkably increased to 91%.

In view of the above, it is respectfully submitted that Applicants have established criticality in the claimed total thickness of less than 3 μ m, and that the limitation as to thickness when considered with respect to the invention as a whole is not obvious over the prior art of record.

Withdrawal of all rejections and allowance of claims 1, 3-7 and 9-17 is earnestly solicited.

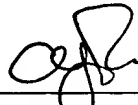
In the event that the Examiner believes that it may be helpful to advance the prosecution of this application, the Examiner is invited to contact the undersigned at the local Washington, D.C. telephone number indicated below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/763,412

Q63262

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Respectfully submitted,



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